Introduction To Geography

**Course Title** 

# Appendix C College of Micronesia-FSM

# **COURSE OUTLINE COVER PAGE**

SS120

**Department and Number** 

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Course Prepared by: Robert Churney				State <u>Pohnpei</u>		
Lecture Laboratory Workshop	-	X	x x x	<u>48</u>	= = : = :	<u>3</u>
Purpose of C	ourse: Degree Ro Degree El Certificat Other	equirement <u>x</u> ective <u>x</u>			_	<u>3</u>
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# Course Description

This course is an introduction to physical and human geography. Students will learn about the physical nature and processes of the earth and atmosphere and the patterns of human interaction with their natural and social environments.

# I. Course Objectives

# A. General Objectives

- 1. Describe the origin and formation of the universe. Describe the earth's physical dynamics and the land formation processes. (Unit 1)
- 2. Describe the dynamics of the earth's atmosphere and the processes of climate and weather. (Unit 2)
- 3. Describe the ways in which humans impact upon the earth. (Unit 3)
- 4. Describe the dynamics of human populations. (Unit 4)
- 5. Describe the significance of human culture, its formation and patterns. (Unit 5)
- 6. Describe the geographical patterns of nation states and global and regional alliances. (Unit 6)
- 7. Describe the major patterns of economic activity and their geographical distribution. (Unit 7)
- 8. Describe the current patterns of global natural resource availability and usage and the prospects for the future. (Unit 8)
- 9. Locate and name all the nations of the world (Unit 9)

### B. Specific Objectives

### Unit 1-- Landforms

- 1. Describe the Big Bang and the formation of the universe, galaxies, solar systems and planets.
- 2. Describe how plate tectonics works and the types of landforms created by this process
- 3. Draw and label the layers of the earth
- 4. Explain how plate tectonics has determined the geological makeup of Micronesia

- 5. List the characteristics of a mineral
- 6. Describe how igneous rocks are formed
- 7. List 4 types of igneous rocks
- 8. Describe how metamorphic rocks are formed
- 9. List 4 types of metamorphic rocks
- 10. Describe how sedimentary rocks are formed
- 11. List 4 types of sedimentary rocks
- 12. Define diastrophism
- 13. Define volcanism
- 14. Explain how diastrophism creates new landforms and alters existing ones
- 15. Explain how volcanism creates new landforms and alters existing ones
- 16. Draw and explain the stages of atoll formation.
- 17. Describe why earthquakes happen in general and why, specifically, they rarely happen in the FSM
- 18. Name the instrument is used to measure the magnitude of earthquakes? Name the scale does this instrument use?
- 19. Explain bow tsunamis are generated 20. Explain mechanical weathering
- 21. Explain chemical weathering
- 22. Describe how erosional agents alter landforms
- 23. Explain how glaciers are formed and the types of landforms they create
- 24. Describe how ocean waves and currents create landforms and alter existing ones

#### Unit 2 -- Climate & Weather

- 1.Distinguish between climate and weather
- 2. Explain how the various elements of weather interact to make weather

- 3. List the 7 variables that determine the temperature at any given location
- 4. Define insolation
- 5. Draw and explain how earth inclination affects weather and climate
- 6. Explain how reflection and reradiation *affect* the amount of incoming solar radiation
- 7. Define air pressure and explain how it affects weather conditions
- 8. Draw and explain the heat convection system
- 9. Draw and explain how mountain valley breezes are generated
- 10. Define the coriolis effect and explain what affect it has on the direction a tropical cyclone spins.
- 11. Draw and explain the El Nino phenomenon. What are its effects on weather in Micronesia?
- 12. Draw and describe the three main types of clouds
- 13. Draw and explain the three types of precipitation 14. Explain the formation of hurricanes and tornadoes
- 15. List the 12 types of climate and give temperature and precipitation characteristics

## Unit 3 Human Impact on the Environment

- 1. List and define the three interrelated parts of the biosphere
- 2. Explain what an ecosystem is and give a local example
- 3. Explain what a food chain is and give a local example
- 4. Describe the various sources of water pollution and its ecological effects
- 5. Draw the layers of the earth's atmosphere and list their characteristics
- 6. Describe the various sources of air pollution and their climatic and ecological effects
- 7. Describe the ways in which human activities negatively affect land and soils
- 8. Describe the ways in which human activities negatively impact plants and animals
- 9. Discuss the problems of solid waste disposal on your island
- 10. Draw and explain the concept of biological magnification

# Unit 4 - Population Geography

- 1. Draw a diagram showing world population trends from 1750 to the present
- 2. List the regions with the highest population growth today and explain why
- 3. List the regions with the lowest population growth today and explain why
- 4. Define crude birth rate
- 5. Define fertility rate
- 6. Define death rate
- 7. Define infant mortality rate
- 8. List four countries with high infant mortality rates and explain why
- 9. List four countries with low infant mortality rates and explain why
- 10. Discuss the World Health Organization findings on maternal death rates
- 11. Draw a population pyramid for rapid growth
- 12. Draw a population pyramid for stability
- 13. Draw a population pyramid for decline
- 14. Describe the methods used by China to control its population
- 15. Describe the methods used by India to control its population
- 16 Describe birth rate, death rate, fertility rate, infant mortality rate and maternal death rate patterns for the FSM

### Unit 5 - Cultural Geography

- 1. Describe how an evolved human nature interacting with a social and physical environment can generate culture
- 2. Explain the concept of technological subsystem of culture and give a comprehensive description for your own society
- 3. Explain the concept of ideological subsystem of culture and give a comprehensive description for your own society

- 4. Explain the concept of sociological subsystem of culture and give a comprehensive description for your own society
- 5. Describe and give concrete examples of the cultural change processes of innovation, diffusion and acculturation
- 6. Define lingua franca. Name the lingua franca of the FSM?
- 7. Define pidgin. Name where pidgin is spoken in the Pacific?
- 8. Explain the Sapir-Whorf hypothesis stating both its strengths and weaknesses
- 9. Describe the social and psychological functions of religion
- 10. Define universalizing religion and give three examples, explaining the universalizing elements of each
- 11. Define ethnic religion and give 3 examples, explaining the ethnocentrism of each 12. On a map draw lines showing the origin and spread of Christianity
- 13. On a map draw lines showing the origin and spread of Buddhism
- 14. On a map draw lines showing the origin and spread of Islam
- 15. Describe the religious geography of the FSM and explain how it got that way

### Unit 6 - Political Geography

- 1. Describe the historical development and consequences of the modern nation state
- 2. List the describe the four main geographical features of nation states
- 3. Describe the role of the Alliance of Small Island States within the United Nations General Assembly. What issues does this organization address?
- 4. List and describe the 6 types of boundaries
- 5. List and describe the 4 types of boundary disputes
- 6. Define nationalism and describe its role in nation states. Explain what nationalizing processes are there in the FSM?
- 7. Describe the disintegration of Yugoslavia and the after effects
- 8. Describe the formation and development of the United Nations. List 4 of its agencies and describe their functions

- 9. Explain the four zones of diminishing control of the United Nations Convention on the Law of the Sea
- 10. Name 2 Pacific regional alliances and describe their functions
- 11. Name 2 African regional alliances and describe their functions
- 12. Name 2 Southeast Asian regional alliances and describe their functions
- 13. Name 2 Euro-American regional alliances and describe their functions

# Unit 7-Economic Geography

- 1. List the four main categories of economic activity and list the activities within each category
- 2. Describe the primary economic activities
- 3. Describe the secondary economic activities
- 4. Describe the tertiary economic activities
- 5. Describe the quaternary economic activities
- 6. Define subsistence economy and give an example
- 7. Define commercial economy and give an example
- 8. Define planned economy and give an example
- 9. Describe the economy of a Chinese village as depicted in the textbook
- 10. Define the Green Revolution and explain its impact on people and economies
- 11. Explain how transnational corporations operate. Explain what positive and negative effects can they have on people and local, regional and global economies?
- 12. Describe what is meant by the term "upside down economy" with regard to the economy of the FSM.

## Unit 8 - The Geography of Natural Resources

- 1. List the natural resources with economic value possessed by the FSM
- 2. List the natural resources not possessed by the FSM but presently heavily used by the FSM.

- 3. Distinguish between renewable and nonrenewable resources
- 4. Describe the energy resource needs of industrial capitalism
- 5. Describe the energy resource consumption patterns of industrialized versus no industrialized nations
- 6. Describe the current availability and usage patterns of crude oil, coal and natural gas
- 7. Explain how nuclear fission and nuclear fusion work
- 8. Describe how hydroelectric power works
- 9. Describe how biomass conversion works
- 10. Describe how solar power works
- 11. Describe how geothermal power works
- 12. Describe how wind power works
- 13. Describe the current patterns of global grain food production
- 14. Describe the current patterns of global fish catching and consumption
- 15. Describe the global patterns of deforestation and its impact

## Unit 9 - The Nations of the World

- 1. Locate and name the nations of the Pacific
- 2. Locate and name the nations of Asia
- 3. Locate and name the nations of Europe
- 4. Locate and name the nations of North & South America
- 5. Locate and name the nations of Africa

### Il. Course Content

# Unit I

Cosmology Geology Vulcanology Siesmology

#### Unit 2

Meteorology

#### Unit 3

Ecology

### Unit-4

Demography

#### Unit 5

Cultural Anthropology

### Unit 6

Political Science International Relations

# Unit 7

**Economics** 

#### Unit 8

Natural Resource Management

### Unit 9

Nations of the World

### III. Textbook

Getis, A., Getis, J. and Fellman, J. 1999, Introduction to Geography, Sixth Edition, McGraw Hill, New York

# IV. Required Course Materials -- none

# V. Reference Materials

"Biodiversity: The Fragile Web," Millenium Series, National Geographic, February 1999.

Karolle, B., Atlas of Micronesia, Second Edition, Bess Press, Honolulu, Hawaii.

Levin, H., 1999, The Earth Through Time, Sixth Edition, Saunders College Publishers, New York.

"Nature's Vicious Cycle: El Nino & La Nina," National Geographic, March 1999.

"Population," Millenium Series, National Geographic, April 1999

Salter, C., Hobbs, J., Wheeler, J., & Kostbade, T., 1999, Essentials of World Regional Geography, Third Edition, Saunders College Publishing, New York.

Thompson, G., Turk, J., & Levin, H., 1995, Earth Past and Present, First Edition, Saunders College Publishing, New York.

"Unlocking the Climate Puzzle," National Geographic, May 1998.

#### VI. Instructional Cost -- none

# VII. Method of Instruction

The method of instruction for this course will be primarily lecture designed to make a connection between the student, the content, and the local, regional and global environments. Numerous videos will also be shown in order to make the learning experience more concrete for the student.

#### Course Videos

Mt Kilauea (Vokanology & Seismology) Mt. Pinatubo (Volcanology & Seismology) The Restless Earth (Seismology)

*Cyclone* (Meteorology)

Coral Reefs: Their Health Our Wealth (Ecology & Natural Resource Management) Population: How Many is Enough? (Demography)

Environmental SWAT Team (Ecology, Natural Resource Managment) Crisis Planet Earth (Global Warming & Greenhouse Effect)

*India* (Regional Geography) *China* (Regional Geography *South America* (Regional Geography) *A, frica* (Regional Geography)

### VII. Evaluation (Suggested)

40% Unit Tests - Short essay type of questions to measure student recall of content and ability to cognitively manipulate this content in the form of narrative answers, thereby strengthening critical thinking and writing skills. The unit test questions will be the same as the specific objectives, therefore measuring the achievement of these objectives by the students.

60% Final Exam - Cumulative, multiple choice, true false and short answer in nature, based on the specific objectives, to measure the cumulative knowledge and understanding of the students. The emphasis is on semester-long retention of a certain volume of information and accompanying cognitive skills.

# Ix Attendance Policy

The standard COM-FSM attendance policy applies to this course